as is contained in the . . . claim," citing Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). For the reasons identified below, Applicants submit that the Examiner has failed to establish anticipation of at least independent claims 1, 14, 27 and 28 by McConnell.

Each of independent claims 1, 14, 27 and 28 includes a limitation that generally specifies the selection of a given one of a plurality of packets for transmission based at least in part on a comparison of weighted versions of computed delay measures, such that the selected packet is the packet having the largest weighted delay associated therewith.

Also, it is important to note that the claims require that the delay measures are computed for a plurality of packets including at least one packet from each of a plurality of queues. Thus, the "computed delay measures" recited in the claims refer to delay measures computed for packets from different queues.

Accordingly, the claims call for computing delay measures for packets from different queues, and comparing weighted versions of the computed delay measures, such that the packet having the largest weighted delay is selected for transmission.

An illustrative embodiment of the claimed invention as described in the specification at page 4, line 12 to page 5, line 28, provides an improved scheduling policy referred to as Largest Weighted Delay First (LWDF). One important advantage associated with this embodiment is that the LWDF scheduling policy is "invariant to changes in stochastic input flow models" (Specification, page 5, lines 26-28).

The McConnell reference fails to teach or suggest at least the above-noted limitations of claims 1, 14, 27 and 28, and thus also fails to provide the associated advantages, such as invariability to changes in stochastic input flow models.

The Examiner in formulating the §102(e) rejection relies on the frame processing operations associated with queues Q1 through Q4 in FIG. 3 of McConnell. Applicants respectfully submit that frames from these queues are not processed in a manner which anticipates the above-described limitations of the independent claims.

Applicants initially note that McConnell indicates that received frames are assigned to the queues Q1 through Q4 based on "predetermined priority levels." This is apparent from, for example, the disclosure in column 5, lines 50-63, which provides as follows with emphasis supplied:

> When a frame arrives, the frame processor reads the DLCI bits 30 in address field 15 of the frame message. The frame processor accesses a lookup table 47 located in memory space 48 in order to assign a predetermined priority level for a message having the DLCI of the message received by the frame processor 46.
> As explained in greater detail below, the various predetermined priority levels found in lookup table 47 will each correspond to a respective first-in first-out (FIFO) queue 50, 52, 54, 56 of memory space 48. Preferably, each of these queues is of fixed length. The frame processor 46 places the received frame into the tail of one of the queues 50, 52, 54, 56 according to its associated priority level provided by lookup table 47.

Thus, McConnell teaches that the queues themselves are already prioritized. Additional disclosure regarding this predetermined prioritization is found in column 6, lines 16-30, and provides as follows with emphasis supplied:

> As explained previously, the number of queues implemented in the frame service device 43 will reflect the number of service class priority levels to be handed by the congestion management scheme. The priority levels may be arbitrarily assigned from low to high, or may be predetermined to reflect or map to quality of service parameters associated with an ATM backbone network. In the preferred embodiment of the frame service device described above, four queues are implemented, which each correspond to a particular class of service associated with the virtual connections of the network node to which the frame processing apparatus 43 pertains. For instance, the queues 50, 52, 54, 56 may respectively represent high priority, medium priority, low priority and best effort priority levels, respectively.

Moreover, McConnell indicates that the predetermined priority levels are used, in conjunction with congestion severity status determined for each of the queues Q1 through Q4, to select a frame from a particular one of the queues Q1 through Q4. This is apparent from the disclosure in column 9, lines 12-20, which provides as follows with emphasis supplied:

> At step 100, it is determined whether there exists more than one frame having the highest queue congestion severity. If not, at step 102 the frame server 58 dispatches the frame with the highest queue congestion severity. However, if there exists more than one frame with the highest queue congestion severity, this congestion severity tie will be resolved in favour of the highest priority level queue at step 104.

Applicants submit that the "congestion severity" measure determined for each of the queues in McConnell does not constitute a weighted version of a computed delay measure, as claimed. Instead, the congestion severity is determined by the use of depth congestion thresholds and age congestion thresholds, as described at column 7, line 10, to column 8, line 17, and without any use of weighting whatsoever. McConnell therefore fails to teach or suggest the claimed arrangements involving computing delay measures for packets from different queues, and comparing weighted versions of the computed delay measures, such that the packet having the largest weighted delay is selected for transmission. In fact, McConnell could be said to teach away from these limitations, by explicitly disclosing a frame selection mechanism which is implemented without any type of weighting of computed delay measures.

The Examiner in formulating the rejection argues that the congestion severity measure constitutes a weighted version of the age severity measure, where age severity corresponds to delay and the weighting is by the depth severity measure (Office Action, page 3, first full paragraph). However, this interpretation is inconsistent with the explicit teachings of McConnell. For example, McConnell teaches in column 8, lines 10-17, that the age severity and depth severity are treated independently in establishing the congestion severity. It cannot be said that the depth severity is applied as a weighting to the age severity, to create a "weighted version" of the age severity, as

would be required by the claim language. Instead, both depth severity and age severity have an entirely separate and independent influence on the congestion severity.

In view of the foregoing, Applicants respectfully submit that there is no teaching or suggestion in McConnell of the particular limitations of claims 1, 14, 27 and 28 relating to computing delay measures for a plurality of packets including at least one packet from each of a plurality of queues, and selecting a given one of the plurality of packets for transmission based at least in part on a comparison of weighted versions of the computed delay measures, such that the selected packet is the packet having the largest weighted delay associated therewith.

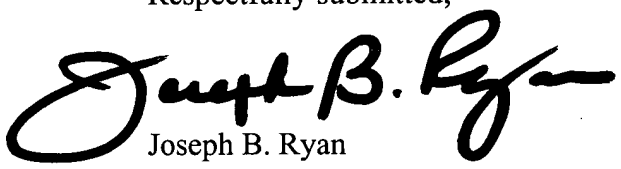
As indicated previously, the McConnell reference, by teaching to utilize an entirely different scheduling technique, actively teaches away from the present invention as claimed.

Since McConnell fails to teach or suggest each and every element of claims 1, 14, 27 and 28, as would be required for an appropriate anticipation rejection, these claims are not anticipated by McConnell, and the §102(e) rejection should be withdrawn.

Dependent claims 2, 3, 15 and 16 are believed allowable at least by virtue of their dependence from their respective independent claims.

Accordingly, Applicants believe that claims 1-28 are in condition for allowance, and respectfully request withdrawal of the §102(e) rejection.

Respectfully submitted,



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